

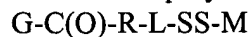
## AMENDMENT TO THE CLAIMS

Claims 1-28, 36 and 44-54 are canceled. Claims 34, 41, and 42 are amended. Claims 28-43, 55 and 56 are presented for reconsideration.

### **Listing of claims:**

Claims 1-28: canceled.

29. (previously presented) A chemically modified biopolymer comprising the following formula:



Wherein G-C(O)- is a biopolymer comprising at least one carbonyl group, -C(O)-, on the biopolymer backbone bound to R,

R is an amino group or an oxygen atom,

L is a lower alkyl spacer,

S is a sulfur atom, and

M is an organic moiety; or any pharmaceutically acceptable salt thereof.

30. (previously presented) The chemically modified biopolymer of claim 29, wherein the biopolymer is selected from the group consisting of hyaluronic acid, carboxymethyl cellulose, carboxymethyl amylose, carboxymethyl chitosan, chondroitin-6-sulfate, dermatan sulfate, polycarbophil, heparin, and heparin sulfate.

31. (Original) The chemically modified biopolymer of claim 30, wherein the biopolymer is hyaluronic acid.

32. (Original) The chemically modified biopolymer of claim 29, wherein the biopolymer is selected from the group consisting of polyacrylic acid, poly- $\alpha$ -glutamic acid, poly- $\gamma$  glutamic acid, and alginate.

33. (previously presented) The chemically modified biopolymer of claim 29, wherein the organic moiety is 2-(3-nitro-pyridine).

34. (currently amended) The chemically modified biopolymer of claim 33, wherein the ~~modified~~ biopolymer is hyaluronic acid ~~modified by 2~~ and the moiety -R-L-SS-M is (3-nitro-2-pyridinesulfonyl)-ethylamine.

35. (previously presented) The chemically modified biopolymer of claim 29 or 33 wherein R is an amino group.

36. canceled.

37. (previously presented) A chemically modified biopolymer comprising the following formula:



Wherein G-C- is a biopolymer having a methylene group, C, bound to R,  
R is an imino or amino group;  
L is a lower alkyl spacer,  
S is a sulfur atom, and  
M is an organic moiety; or any pharmaceutically acceptable salt thereof.

38. (previously presented) The chemically modified biopolymer of claim 37, wherein the biopolymer is selected from the group consisting of hyaluronic acid, carboxymethyl cellulose, carboxymethyl amylose, carboxymethyl chitosan, chondroitin-6-sulfate, dermatan sulfate, polycarbophil, heparin, and heparin sulfate.

39. (Original) The chemically modified biopolymer of claim 38, wherein the biopolymer is hyaluronic acid.

40. (Original) The chemically modified biopolymer of claim 37, wherein the biopolymer is selected from the group consisting of polyacrylic acid, poly- $\alpha$ -glutamic acid, poly- $\gamma$ -glutamic acid, and alginate.

41. (currently amended) The chemically modified biopolymer of claim 327, wherein the organic moiety is 2-(3-nitro-pyridine).

42. (currently amended) The chemically modified biopolymer of claim 41, wherein the ~~modified~~ biopolymer is hyaluronic acid ~~modified by 2-~~ and the moiety -R-L-SS-M is (3-nitro-2-pyridinesulfonyl) ethylamine.

43. (previously presented) The chemically modified biopolymer of claims 37 or 41 wherein R is an amino group.

Claims 44-54: canceled.

55. (previously presented) The chemically modified biopolymer of claim 34 wherein the modified biopolymer has a degree of modification in a range of about 1-2%, 15-20%, or 40 to 50%.

56. (previously presented) The chemically modified biopolymer of claim 42 wherein the modified biopolymer has a degree of modification of about 35% or 50%.